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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,115	08/08/2001	Travis L. Allan	A-7519.SMP/cat	9973

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EXAMINER

TUCKER, PHILIP C

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 09/23/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/924,115

Applicant(s)
Allan et al.

Examiner
Philip Tucker

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1712



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 10, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18, 21, and 22 is/are rejected.
- 7) ☒ Claim(s) 1-22 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

Claim Objections

1. Claims 1-22 are objected to because of the following informalities: In the claims the groups R1 and R2 are connected to the carbon atom instead of the nitrogen atom. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5, 13 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Each of these claims utilize the term "selected from the group including", which implies that there are other compounds which are part of the group, but not listed. Proper Markush terminology such as "selected from the group consisting of" should be used.

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Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Thomas (5591701).

Thomas teaches a fluid for use in a wellbore which comprises glycines and betaines within the scope of the present invention, which are used in brines, to which acid is added (see claims, compounds in column 6, column 4, lines 11-18 and Tables II and IV). Applicants intended use as a fracturing fluid does not distinguish over the prior art (In re Pearson 181 USPQ 641).

6. Claims 1-4, 6, 7, 11, 12, 14, 15 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Dahyanake (6482866).

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Dahayanake teaches a viscoelastic surfactant based fluid which comprises a zwitterionic or amphoteric surfactant within the scope of the present invention, and further comprises an organic acid and a salt (see examples, claims and columns 4-6). An alcohol is used to aid the solubilization of the surfactant (column 8, lines 14-19). The fluid is used in fracturing operations (column 2, lines 10-13). The present invention is thus anticipated by Dahayanake.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 3, 6-11 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahayanake (6482866).

Dahayanake teaches a viscoelastic surfactant based fluid which comprises a zwitterionic or amphoteric surfactant within the scope of the present invention, and further comprises an organic acid and a salt (see examples, claims and columns 4-6). An alcohol is used to aid the solubilization of the surfactant (column 8, lines 14-19). The fluid is used in fracturing operations

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(column 2, lines 10-13). Dahayanake teaches that the fluid may be foamed with a gas, such as air, nitrogen or carbon dioxide. Dahayanake differs from the present invention in that the specific amount of gas used in the foam is not disclosed. It would however be obvious to one of ordinary skill in the art to vary the amount of gas, in the foam, in order to achieve optimal foam properties for fracturing operations (In re Aller 105 USPQ 233).

9. Applicants arguments have been considered but are not deemed fully persuasive. The submission of the priority document has overcome the rejection over Lungwitz. With respect to Thomas, applicants claim requires the surfactant, acid and salt which is clearly covered by the teaching of Thomas. The claim does not require a gel or viscoelastic system as argued by applicant, and thus these features cannot be used to distinguish over Thomas. The reason for Thomas adding the acid is not relevant to the finding of anticipation (In re Lintner 173 USPQ 356, In re Jones 50 USPQ 48). Furthermore, applicants claim does not distinguish over the ratios of the surfactants of Thomas and is thus not distinguishing. The mere contemplation of ratios outside this scope by the present invention is not a distinguishing factor. Similarly, with respect to Dahayanake, the use of an alcohol clearly meets the scope of the claim. The fact that applicant may consider other solvents is not a distinguishing factor. Anticipation only requires that the reference disclose the elements as cited in the claim, not some outside scope that may be contemplated in the specification. Applicants range of foam quality of 52-95% is extremely broad, and cannot be seen as distinguishing over Dahayanake, since one of ordinary skill in the

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art would be expected to test a broad range of foam qualities in order to obtain an optimum value for fracturing purposes.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tucker whose telephone number is (703) 308-0529. The examiner's normal working hours are 7:30am-4:00pm, Monday-Friday. If necessary SPE Robert Dawson may be contacted at 703-308-2340. For inquiries of a general nature call the receptionist at 703-308-0651. The group FAX no. is 703-872-9306.

PCT-2753
September 22, 2003


PHILIP C. TUCKER
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